

1. (twice amended) A secondary battery storage system for connection to a power system, the storage system comprising:

- a secondary battery connected to a secondary battery load;
- a detecting device for detecting a residual electric power of said secondary battery;
- a connection [charge/discharge] unit connected to the power system and to said secondary battery;
- a control unit connected to said connection [charge/discharge] unit; and
- a signal line for transmitting information about said secondary battery through said detecting device to said control unit, wherein said control unit controls said connection [charge/discharge] unit on the basis of said information, wherein said information comprises measured values for determining a residual electric power stored in the secondary battery, wherein for discharging the residual electric power said connection unit selects either the secondary battery load or the power system depending on the residual electric power stored in the secondary battery.

2. (twice amended) A secondary battery storage system according to claim 1, further comprising a plurality of loads, wherein the plurality of loads is connected to said connection [charge/discharge] unit, and said plurality of loads is connected to said signal line, wherein for discharging the residual electric power said connection unit selects at least a load of said plurality of loads depending on the residual electric power stored in the secondary battery, and [wherein said charge/discharge unit distributes electric power of said secondary battery to at least a load of said plurality of loads,] wherein said information further comprises information about the operating condition of at least one load of said plurality of loads connected to the connection [charge/discharge] unit.

3. (twice amended) A secondary battery storage system according to claim 1, further comprising a plurality of loads, wherein the plurality of loads is connected to said connection [charge/discharge] unit, and said plurality of loads is connected to said signal line, wherein for discharging the residual electric power said connection unit selects at least a load of said plurality of loads depending on the residual electric power stored in the secondary battery.

[wherein said charge/discharge unit distributes electric power of said secondary battery to at least a load of said plurality of loads] and further comprising a plurality of electric power storage units, wherein the plurality of electric power storage units is connected to said connection [charge/discharge] unit, and the plurality of electric power storage units is connected to said signal line, wherein for discharging the residual electric power said connection unit selects at least a unit of said plurality of electric power storage units depending on the residual electric power stored in the secondary battery. [wherein said charge/discharge unit distributes electric power of said secondary battery to at least a unit of said plurality of electric power storage units,] wherein said information further comprises information about the operating condition of at least one load of said plurality of loads and the operating condition of at least one electric power storage unit of said plurality of electric power storage units.

4. (twice amended) A secondary battery storage system according to claim 1, further comprising a plurality of electric power storage units, wherein the plurality of electric power storage units is connected to said connection [charge/discharge] unit[s], and said plurality of electric power storage units is connected to said signal line, wherein for discharging the residual electric power said connection unit selects at least a unit of said plurality of electric power storage units, depending on the residual electric power stored in the secondary battery. [wherein said charge/discharge unit distributes electric power of said secondary battery to at least a unit of said plurality of electric power storage units,] wherein said information further comprises information about the operating condition of at least one unit of said plurality of electric power storage units.

12. (twice amended) A secondary battery storage system for connection to a power system, the storage system comprising:

- a secondary battery connected to a secondary battery load;
- a connection [charge/discharge] unit connected to the secondary battery, said connection [charge/discharge] unit connected to the power system and either a plurality of loads or a plurality of electric power storage units;
- a detecting device for detecting a residual electric power in the secondary [secondry] battery; and

a control unit for controlling the connection [charge/discharge] unit on the basis of information from the secondary battery and at least one of the loads of the plurality of loads or at least one of the units of the plurality of electric power storage units, wherein for discharging the residual electric power said connection unit selects at least a load of said plurality of loads or a unit of said plurality of electric power storage units depending on the residual electric power stored in the secondary battery. wherein a controller receives information from at least either the secondary battery or the plurality of loads and controls the connection [charge/discharge] unit; a computer that measures the amount of electric power charged into and the amount of electric power discharged from the secondary battery, calculates the amount of residual electric power stored in the secondary battery, and comprises a memory for storing measured data of the secondary battery and arithmetic program information, and a controller for processing the information stored in the memory or information given thereto from external devices, and an analog-to-digital converter through which information provided by the external devices is given to the controller.

18. (twice amended) A secondary battery storage system for connection to a power system, the storage system comprising a connection [charge/discharge] unit connected to the power system, and connected to at least either a plurality of loads or a plurality of electric power storage units and having connecting means to connect the connection [charge/discharge] unit to a secondary battery; wherein the connection [charge/discharge] unit is controlled by a controller on the basis of information received from the plurality of loads or the plurality of electric power storage units, and wherein for discharging a residual electric power of said secondary battery said connection unit selects at least a load of said plurality of loads or a unit of said plurality of electric power storage units depending on the residual electric power stored in the secondary battery, further comprising an information transmitting means for interconnecting the controller and at least either the connecting means or the plurality of loads connected to the connection [charge/discharge] unit.

19. (twice amended) A method of operating a secondary battery storage system for connection to a power system, the storage system comprising:

a secondary battery connected to a secondary battery load;  
a detecting device for detecting a residual electric power of said secondary battery;  
a connection [charge/discharge] unit connected to the power [source] system and to said secondary battery;  
a control unit connected to said connection [charge/discharge] unit; and  
a signal line for transmitting information about said secondary battery through said detecting device to said control unit;

the method comprising:

selecting the power system for discharging [feeding] a residual electric power of the secondary battery [to the power system] through the connection [charge/discharge] unit after an electric power stored in the secondary battery is discharged to the secondary battery load, depending on the residual electric power stored in the secondary battery.

20. (twice amended) A method of operating a secondary battery storage system for connection to a power system, the storage system comprising: a secondary battery connected to a secondary battery load, and a connection [charge/discharge] unit connected to the power system and connected to at least either a plurality of loads or a plurality of electric power storage [strage] units; the method comprising:

feeding surplus electric power from the secondary battery to at least either a load of the [a] plurality of loads or a unit of the [a] plurality of electric power storage units, depending on the residual electric power of the secondary battery, prior to charging said secondary battery with power from the power system.

33. (twice amended) A method of operating a secondary battery storage system according to claim 20, further comprising feeding residual electric power from the secondary battery to the secondary battery load, wherein said feeding surplus electric power further compris[ing]es discharging surplus electric power through the connection [charge/discharge] unit from the secondary battery after said feeding residual electric power from the secondary battery to the secondary battery load, [wherein] stopping said discharging of the surplus electric power while the secondary battery still comprises residual electric power [is stopped if the discharge of the